

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 - 44. Cancelled.

45 (Currently Amended). A method of delivering a the transgene of claim 60 to a cell, said method comprising the step of contacting the cell with a the non-naturally occurring AAV according to claim 60, ~~wherein said rAAV comprises the transgene.~~

Claims 46 – 59. Cancelled.

60 (Currently Amended). A non-naturally occurring adeno-associated virus (AAV) comprising an AAV9 capsid which comprises AAV vp1, AAV vp2 and AAV vp3 capsid proteins, ~~wherein at least one of said capsid proteins is an AAV9 capsid protein~~ said capsid comprising a sequence selected from the group consisting of: ~~vp1-capsid protein~~, amino acids (aa) 1 to 736; of SEQ ID NO:123; ~~vp2-capsid protein~~, aa 138 to 736; ~~of~~ SEQ ID NO: 123 ; and ~~vp3-capsid protein~~, aa 203 to 736; ~~of~~ SEQ ID NO: 123 , said AAV further comprising a minigene having AAV inverted terminal repeats and a transgene comprising a heterologous gene operably linked to regulatory sequences which direct its expression in a host cell.

61 (Currently Amended). The non-naturally occurring adeno-associated virus (AAV) according to claim 60, wherein the AAV9 capsid ~~protein~~ is encoded by a nucleic acid sequence selected from the group consisting of:

vp1, nucleotides (nt) 1 to 2211 of SEQ ID NO: 3;

vp2, nt 411 to 2211 of SEQ ID NO:3; and

vp 3, nt 609 to 2211 of SEQ ID NO:3;

~~wherein the nucleotides numbers are of AAV9, SEQ ID NO: 3.~~

62 (Previously Presented). A composition comprising the non-naturally occurring AAV according to claim 60 and a physiologically compatible carrier.

63 (Currently Amended). A method of delivering the a transgene to a cell, said method comprising the step of contacting the cell with the AAV according to claim 65, ~~wherein said minigene comprises the transgene.~~

64 (Currently Amended). The method according to claim 63, wherein the transgene encodes a protein is selected from the group consisting of: a low density lipoprotein (LDL) receptor, a high density lipoprotein (HDL) receptor, a very low density lipoprotein (VLDL) receptor and a scavenger receptor.

65 (Currently Amended). An adeno-associated virus (AAV) comprising an AAV9 capsid, wherein the AAV9 capsid comprises AAV vp1, AAV vp2 and AAV vp3 proteins; ~~wherein said proteins which~~ comprise an amino acid sequence is at least 95% identical to amino acids 203 to 736 of SEQ ID NO: 123 selected from the group consisting of SEQ ID NO: 121 and SEQ ID NO: 122, and wherein said AAV further comprises a minigene having AAV inverted terminal repeats and a transgene comprising a heterologous gene operably linked to regulatory

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sequences which direct its expression in an host cell, wherein said amino amino acid sequence is selected from the group consisting of SEQ ID NO: 121 and SEQ ID NO: 122.

Cancel claims 66 - 76.